

Weld County, Colorado, Southern Part

4—Aquolls and Aquepts, flooded

Map Unit Setting

National map unit symbol: 362I

Elevation: 3,600 to 4,700 feet

Mean annual precipitation: 12 to 16 inches

Mean annual air temperature: 50 to 55 degrees F

Frost-free period: 100 to 165 days

Farmland classification: Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Aquolls and similar soils: 55 percent

Aquepts, flooded, and similar soils: 25 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Aquolls

Setting

Landform: Drainageways, plains, depressions

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Recent alluvium

Typical profile

H1 - 0 to 8 inches: variable

H2 - 8 to 60 inches: stratified sandy loam to clay

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to high (0.06 to 6.00 in/hr)

Depth to water table: About 6 to 36 inches

Frequency of flooding: FrequentNone

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 5.0

Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): 6w

Land capability classification (nonirrigated): 6w

Hydrologic Soil Group: D
Ecological site: R067BY035CO - Salt Meadow
Hydric soil rating: Yes

Description of Aquepts, Flooded

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Recent alluvium

Typical profile

H1 - 0 to 8 inches: variable
H2 - 8 to 60 inches: stratified sandy loam to clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 6.00 in/hr)
Depth to water table: About 6 to 36 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): 6w
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: D
Ecological site: R067BY038CO - Wet Meadow
Hydric soil rating: Yes

Minor Components

Haverson

Percent of map unit: 10 percent
Hydric soil rating: No

Thedalund

Percent of map unit: 10 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 19, Jun 5, 2020

Weld County, Colorado, Southern Part

73—Vona loamy sand, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2x0j8

Elevation: 4,100 to 5,200 feet

Mean annual precipitation: 12 to 17 inches

Mean annual air temperature: 46 to 52 degrees F

Frost-free period: 130 to 155 days

Farmland classification: Not prime farmland

Map Unit Composition

Vona and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vona

Setting

Landform: Hills, hillslopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear, convex

Across-slope shape: Linear, convex

Parent material: Eolian sands

Typical profile

A - 0 to 7 inches: loamy sand

Bt1 - 7 to 14 inches: sandy loam

Bt2 - 14 to 20 inches: sandy loam

Bk - 20 to 45 inches: sandy loam

C - 45 to 80 inches: loamy sand

Properties and qualities

Slope: 3 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Nonsaline (0.1 to 1.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R067BY015CO - Deep Sand
Hydric soil rating: No

Minor Components

Ascalon

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

Manter

Percent of map unit: 5 percent
Landform: Hills, interfluves
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

Olnest

Percent of map unit: 3 percent
Landform: Interfluves, hills
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Interfluve, base slope
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

Valent

Percent of map unit: 2 percent
Landform: Dunes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Crest, side slope, nose
slope
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Ecological site: R067BY015CO - Deep Sand
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 19, Jun 5, 2020

Weld County, Colorado, Southern Part

72—Vona loamy sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 363r
Elevation: 4,600 to 5,200 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Vona and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vona

Setting

Landform: Plains, terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy sand
H2 - 6 to 28 inches: fine sandy loam
H3 - 28 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High
(1.98 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: R067BY024CO - Sandy Plains

Hydric soil rating: No

Minor Components

Remmit

Percent of map unit: 10 percent

Hydric soil rating: No

Valent

Percent of map unit: 5 percent

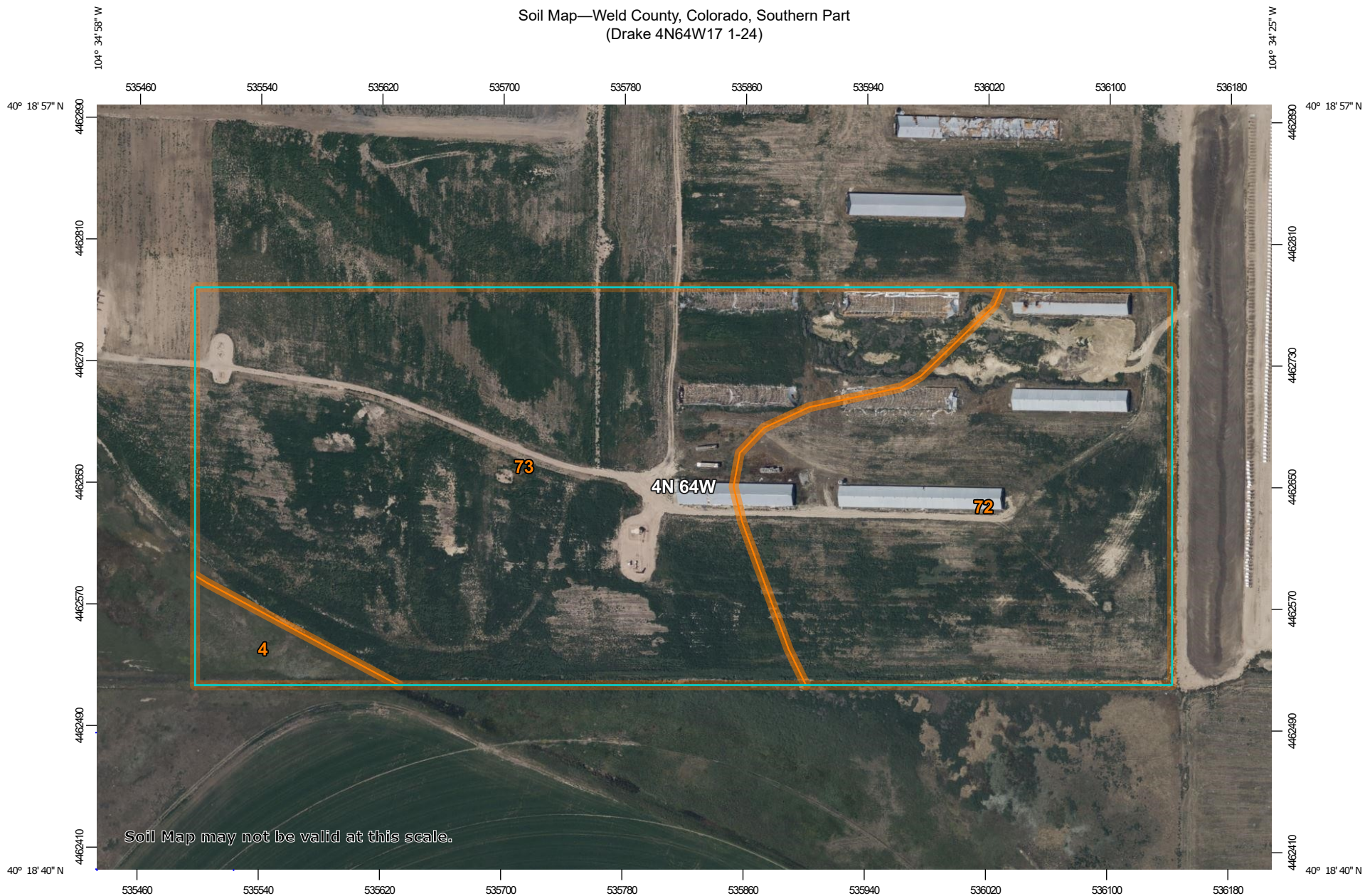
Hydric soil rating: No

Data Source Information

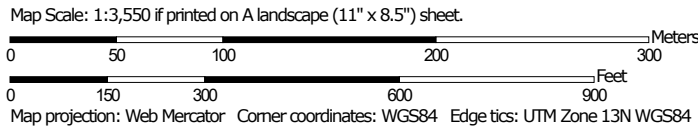
Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 19, Jun 5, 2020

Soil Map—Weld County, Colorado, Southern Part
(Drake 4N64W17 1-24)




Soil Map may not be valid at this scale.







MAP LEGEND



















Area of Interest (AOI)








 Area of Interest (AOI)

Soils



 Soil Survey Areas
 Soil Map Unit Polygons
 Soil Map Unit Lines
 Soil Map Unit Points

Special Point Features

 Blowout
 Borrow Pit
 Clay Spot
 Closed Depression
 Gravel Pit
 Gravelly Spot
 Landfill
 Lava Flow
 Marsh or swamp
 Mine or Quarry
 Miscellaneous Water
 Perennial Water
 Rock Outcrop
 Saline Spot
 Sandy Spot
 Severely Eroded Spot
 Sinkhole
 Slide or Slip

 Sodic Spot
 Spoil Area
 Stony Spot
 Very Stony Spot
 Wet Spot
 Other
 Special Line Features





Political Features

 PLSS Township and Range
 PLSS Section


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Weld County, Colorado, Southern Part
 Survey Area Data: Version 19, Jun 5, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 19, 2018—Aug 10, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Aquolls and Aquepts, flooded	1.2	2.8%
72	Vona loamy sand, 0 to 3 percent slopes	15.2	36.3%
73	Vona loamy sand, 3 to 5 percent slopes	25.5	60.8%
Totals for Area of Interest		41.9	100.0%